PROGRAM PLC\_PRG

VAR

CODE4: Code4 ; // instance of Code4

STICKINPUTIN: LREAL;

IN2: LREAL;

IN3: LREAL;

IN4: LREAL;

END\_VAR

STICKINPUTIN:= 100 ;

IN2:= 100;

IN3:= 100;

IN4:= 100;

CODE4 (StickInputin := STICKINPUTIN,In2 := IN2 , In3 := IN3 , In4:= IN4 );

FUNCTION\_BLOCK Code4

VAR\_INPUT

StickInputin: LREAL;

In2: LREAL;

In3: LREAL;

In4: LREAL;

END\_VAR

VAR\_OUTPUT

Out1: LREAL;

Out2: LREAL;

END\_VAR

VAR

Index1 : LREAL ;

Index2 : DINT ;

Array\_: ARRAY [1..100] OF LREAL ;

INPUTTOINDEX : InputToIndex; //instance of InputsToIndex3

END\_VAR

Index1 := (In2)+(In3)+(In4);

Index2 := LREAL\_TO\_INT (Index1);

Array\_[Index2] := StickInputin;

INPUTTOINDEX(Input2:= In2,Input3:= In3,Input4:= In4);

(\* Outputs for Atomic SubSystem: '<Root>/Code 1' \*)

(\* Sum: '<S1>/Sum2' incorporates:

\* Gain: '<S1>/Gain2'

\* Gain: '<S1>/Gain3'

\* Sum: '<S1>/Sum1' \*)

Out1 := StickInputin - ((0.8156 \* In4) + (0.677 \* In3));

(\* Outport: '<Root>/Out2' incorporates:

\* Gain: '<S1>/Gain'

\* Sum: '<S1>/Sum' \*)

Out2 := (-1.746 \* Out1) + In2;

(\* End of Outputs for SubSystem: '<Root>/Code 1' \*)

FUNCTION\_BLOCK InputToIndex

VAR\_INPUT

Input2 : LREAL ;

Input3 : LREAL ;

Input4 : LREAL ;

END\_VAR

VAR\_OUTPUT

Array\_ : ARRAY [1..100] OF LREAL ;

END\_VAR

VAR

Index1 : LREAL ;

Index2 : DINT ;

i : DINT;

END\_VAR

Index1 := Input2\*Input3\*Input4 ;

Index2 := LREAL\_TO\_DINT (Index1);

FOR i:= 0 TO Index2 DO

Array\_[i] := Index2 + i ;

END\_FOR